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## Assessment Report

Assessment No. 96-003

# RMRS Environmental Restoration Conduct of Operations Program (COOP) at Operable Unit 7, Landfill and Dam A-4

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## 1. EXECUTIVE SUMMARY

This Report provides results of an assessment to determine the degree of implementation and compliance to the Rocky Flats Environmental Technology Site Conduct of Operations Manual at Operable Unit (OU) 7 landfill and Dam A-4. The fieldwork for this assessment was conducted between May 28, 1996 and June 20, 1996.

The primary functional areas reviewed during the assessment included:

- Readiness Assessment process and construction at the OU-7 Landfill
- Surface Water Management, Construction, and Operation at A-4 Dam
- Training Activities and Plan of the Day Operations

Two deficient conditions, and four improvement items, which were documented during the assessment, are briefly described below. For a complete description of each condition, refer to the body of the report. Deficient conditions, which are documented on the CMCAP (Commitment Management Corrective Action Process) Identification Form, are being tracked by the Corrective Action and Tracking System (PATS) and are referenced in this report by the commitment number.

- Commitment No. 96-001700, issued to the manager of Environmental Restoration (ER) Operations reports a lack of record management where there is no documented Readiness Assessment (RA) in the OU-7 Passive Seep Collection & Treatment System history file or in the project file center.
- Commitment No. 96-001695, issued to the manager of ER Operations reports a lack of checks and balances to control work where RA checklists are developed with no QA member assigned. Checklist items are closed without approval or justification. Checklist items are closed without documenting evidence of closure.

Various conditions, which are discussed as improvement items are documented in the body of the report. The audit team concluded that these conditions were isolated cases and/or did not adversely affect the overall implementation of COOP by RMRS, ER Operations at OU-7 and Dam A-4.

In summary, with the except of the two deficiencies which address COOP supporting activities, RMRS ER Projects effectively implements the Conduct of Operations Program through implementation of formal plans and operating procedures. Implementation of these plans and procedures demonstrates compliance with work controls, as prescribed by COOP. In addition, training requirements are identified and verified for all workers through Readiness Assessment and Pre-evolution briefings. Overall, documents and procedures evaluated were complete, available, and usable. Personnel contacted during the assessment appeared to be competent and cognizant of COOP requirements.

## **2. PURPOSE**

### **2.1 Subject**

RMRS Environmental Restoration (ER) Conduct of Operations Program (COOP) at OU-7 and Dam A-4.

### **2.2 Objective**

The objective of this assessment was to evaluate the effectiveness and compliance by ER Projects with the principles of the Conduct of Operations Manual.

### **2.3 Scope**

#### **2.3.1 Assessment Category and Characteristics**

This was an announced assessment performed using Procedure 2-B52-ADM-02.01, Independent Assessment contained within the Site Quality Assurance Program Procedures Manual..

#### **2.3.2 Assessment Functional and Programmatic Areas**

This assessment examined the following activities and functions:

- Readiness Assessment process and construction at the OU-7 Landfill
- Surface Water Management, Construction, and Operation at A-4 Dam
- Training Activities and Plan of the Day Operations

#### **2.3.3 Physical Boundaries**

This assessment was restricted to OU-7 and Dam A-4, and administrative support facilities.

## **3. CONDUCT OF THE ASSESSMENT**

### **3.1 Assessment Schedule**

Entrance Meeting:	May 28, 1996
Start of Fieldwork:	May 28, 1996
End of Fieldwork:	June 20, 1996
Exit Meeting:	July 17, 1996

### **3.2 Previous Assessment Activities in This Subject Area**

This is the first RMRS independent assessment of the ER Conduct of Operations Program.

### **3.3 Independent Verification of Previously Identified Deficiencies**

#### **3.3.1 Deficiencies Verified Complete by the Assessment Team**

None

### 3.3.2 Deficiencies Reopened by the Assessment Team

None

## 3.4 Assessment Methodology/Performance Criteria

### 3.4.1 Assessment Methodology

The following evaluation methods were used to determine compliance and effectiveness:

- Personnel interviews
- Document and record reviews
- Facility Tours

### 3.4.2 Assessment Performance Criteria

The following assessment performance criteria were used to determine compliance and effectiveness:

- The RMRS Conduct of Operations Program is implemented according to the Environmental Restoration Program Division COOP Implementation Plan or those procedures and plans that effectively implement the intent of COOP.
- Personnel demonstrate adequate compliance with procedures that are subject to COOP requirements.
- Training requirements are defined and provided before tasks are assigned or implemented.

## 4. RESULTS

The Environmental Restoration (ER) Projects has demonstrated a formal Conduct of Operations Program exists. The program satisfies the intent of DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities. The ER Operations group must take steps to correct conditions adverse to quality in the area of record management and work controls in the readiness assessment process. Other areas require improvement or additional effort for full implementation of COOP. The surface water division must take those steps needed to complete the COOP requirements.

The assessment evaluated 3 areas or projects in environmental operations. The assessment evaluated ER Projects according to the types of activity performed.

- Readiness assessment process and construction activities for the OU-7 Passive Seep Collection and Treatment System.
- The construction and operations improvements at dam A-4.
- Training activities and Weekly Plan of the Day operations.

### 4.1 Readiness Assessment Process and Construction at OU-7 Landfill

A review of the OU-7(Passive Seep Collection Treatment) Project files revealed that a readiness assessment was not performed or was not maintained, as required. ER personnel were unable to provide objective evidence that would indicate that a readiness assessment was performed for

activities at OU=7. This condition is considered to be deficient and is documented on a Commitment Management Corrective Action Process (CMCAP) Identification Form, Commitment No. 96-001700. As a result, additional project files were reviewed to determine if the lack of a readiness assessment for OU-7 was an isolated incident. Although the review of these additional project files did not indicate a lack of readiness assessments, other discrepancies were noted. These additional discrepancies listed below demonstrate a lack of attention to detail by ER personnel regarding readiness assessments. These details are the checks and balances required to ensure activities are indeed ready to proceed. This condition is considered to be deficient and is documented on a CMCAP Identification Form, Commitment No. 96-001695.

- Checklist items for RA 95/050 are closed with no evidence of readiness. A requirement to ensure submission of project records to the ER record center is closed as "Not Applicable", without justification or approval of a verifier.
- The Readiness Assessments database has no status indication for checklist RA 95/026 (Sand Rock Toe Dam, upgrades). The completed IWCP package, T0083561 has a fax copy of the RA checklist with redline comments that are contrary to requirements. Procurement requirements are marked N/A. A Quality Support team member was not assigned. No version of the RA was signed by a QA team member or the QA Board Member.
- The RA Procedure requires the responsible manager to ensure that requirements which are prerequisite for an activity are addressed before initiating an RA. The Readiness Assessment Worksheet (RAW) identifies subject matter experts but does not capture comments or requirements identified by the SME in checklist 96/002 and 95/026. Development of a draft checklist usually follows the boilerplate for RFI/RI activities, instead of developing a checklist that addresses a specific project. The resulting draft checklist is inadequate to address work controls, construction hold points, design controls, records management, or specific compliance

#### 4.1.1 Deficiencies

Commitment No. 96-00170, issued to the manager of ER Projects, states "Contrary to applicable procedures and requirements, there is no documented Readiness Assessment in the history file or in the project file center."

Requirement: Procedure 2-G21-ER-ADM-18.03, Environmental Restoration Program Division Readiness Assessments Rev.1, Section 5.7 states that the ERPD RA Coordinator; "Prepares and Distributes copies of the Evidence of Readiness Report to the RMs, the affected organizations, and contractor(s) or subcontractor(s)." and "Ensures that records are complete and transmitted to the ERPD Project File Center (PFC) in accordance with 2-G18-ER-ADM-17.01."

Commitment No. 96-00170, issued to the manager of ER Projects, states "Contrary to the RA procedure, checklists are developed with no QA Team member assigned and no QA board member. Checklist items are closed as N/A without SME approval or justification. Checklist items are closed without identifying what documentation provides evidence of closure."

Requirement: Procedure 2-G21-ER-ADM-18.03, Environmental Restoration Program Division Readiness Assessments Rev.1, Section, 6.2 states in part the EOM manager will "Verify that the activity falls within the scope of the ERPD RA program and approve the Team and the Board as designated by signing the RA Notice." Section 6.5 states the ERPD RA coordinator will "[2] Verify that each item on the checklist requirement has been met." and "[A] Attach documentary evidence or notation for each verification. [B] Label each verification document with the corresponding Checklist item number and the date the document was received. [C] When an item is Not applicable, then: [a] Record N/A rather than dating the checklist item. [b] Provide an explanation for the N/A."

#### 4.1.2 Improvement Items

The RA coordinator initiates a checklist for development and assembles comments submitted by the RA team or board members. Team and board member comments are not resolved in some cases.

- Environmental Operations should implement the checks and balances to resolve all comments through the RA team or board.

#### 4.2 Surface Water Management, Construction, and Operations at A-4 Dam

The types of records and documents reviewed in this assessment include Corrective Action Plans, Management and Sampling Plans, Work Plans, Standard Operating Procedures, Emergency Response Plans, and field log books or electronic data. In addition to administrative activities the assessment reviewed training records, daily log sheets, safety toolbox meetings and Pre-evolution briefings as part of the work process. The assessment included a walkdown of the facilities and review of associated project records. The assessment also reviewed the corrective action for an occurrence report involving an unapproved water release at the A-4 dam construction project. The corrective actions were approved and on schedule for completion.

##### 4.2.1 Deficiencies

No deficiencies were identified in this area of the assessment.

##### 4.2.2 Improvement Items

A program that controls work processes must address planning, communication, training and procedures. Readiness Assessment Checklists are not automatically germane to obtaining required approvals for construction projects or corrective actions/ accelerated actions under CERCLA. This evaluation concludes that the level of implementation for Surface Water Management can be improved. The following improvements are offered for consideration.

- Prepare a process where RMRS can conduct internal sampling and analysis to expedite water level controls at retention ponds when circumstance require an immediate release decision. This process could be implemented as a lesson learned when all dam upgrades are complete.
- RMRS Surface Water Management should adopt the current ER Operations COOP implementation plan or prepare a Surface Water COOP implementation plan.
- The Readiness Assessment approvals for management of incidental waters should come from Surface Water Management.

#### 4.3 Training Activities and Plan of The Day Operations

A review of training records and Pre-evolution forms, a walk down of the weekly ER Plan of The Day meeting, and pond water activity indicates a thorough process for communicating and training for ER operations. No deficiencies or improvement items are noted for this area of assessment.

##### 4.3.1 Deficiencies

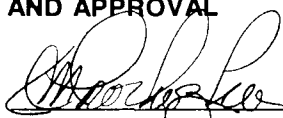
No deficiencies were identified in this area of the assessment.

##### 4.3.2 Improvement Items

No improvement items were identified in this area of the assessment.

## 5. REPORT REVIEW AND APPROVAL

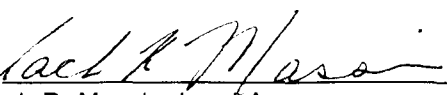
Prepared By:

  
T. M. Prochazka, Assessor  
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Date

7/30/96


Reviewed By:

  
J. R. Massie, Lead Assessor  
RMRS Quality Assurance

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7/30/96

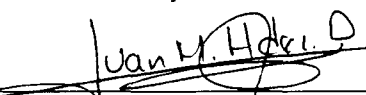
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J. R. Bennett, Quality Assessment Lead  
RMRS Quality Assurance

Date

7.30.96

Approved By:

  
J. M. Hernandez, QA Manager  
RMRS Quality Assurance

Date

31 JUL, 96



## APPENDIX A

## DOCUMENTS REVIEWED

The Following Documents were reviewed to determine compliance with applicable requirements.

The RFETS Conduct of Operations Manual, October 26, 1995, Rev.0.

1-A25-5500-06.08 Rev. 0, Emergency Response Plan for Failure of Dams A-4, B-5, or C-2.

A-4 Project Dewatering Corrective Action Plan, Rev. 1, 4/29/96.

IWCP T0086605, Maintenance Operations For the Passive Seep Collection Treatment System at OU-7, (Open)

IWCP T0085435, Construction of Passive Seep Collection and Treatment System at The OU-7 Landfill, (Open)

DOE Order 5481.1B Safety Analysis & Review

DOE Order 5480.31 Start & Restart of Nuclear Facilities

2-G21-ER-ADM-18.03 ERPD Readiness Assessments, Rev.1

## APPENDIX B

## ASSESSMENT TEAM MEMBERS AND PERSONNEL CONTACTED

**Assessment Team Members**

The following personnel conducted this assessment:

	<u>Name</u>	<u>Organization</u>
<b>Lead Assessor:</b>	E. A. Larson	Quality Assurance
<b>Lead Assessor:</b>	J. R. Massie*	Quality Assurance
<b>Assessor:</b>	T. M. Prochazka	Quality Assurance

\* J. R. Massie replaced Mr. Larson as lead during this assessment.

**Personnel Contacted**

The following persons provided significant contributions to complete this assessment.

<u>Name</u>	<u>Organization</u>	<u>Participation*</u>
K. M. Motyl	Surface Water Management	1,2
C. R. Hoffman	Surface Water Management	1,2
C. S. Evans	E R Projects	1
M. C. Broussard	E R Projects	1,2,4
R. S. Luker	Quality Assurance	1,3
M. T. Vess	E R Projects	1
L. A. Dunstan	Surface Water Management	2
M. Churchill	Smith/Reidel	2
A. R. Helmick	RTG	2
L. J. Peterson-Wright	E R Projects	2
A. L. Casillas	E R Projects	2

- \* 1 Entrance Meeting  
 2 Evaluation Contributor  
 3 Formal Exit Meeting  
 4 Informal Exit Meeting (conducted in person or by telephone)